

EXECUTIVE SUMMARY

INTRODUCTION

On August 30, 2001, San Jacinto Rail Limited (SJRL)¹ and The Burlington Northern and Santa Fe Railway (BNSF) (collectively the Applicants) filed a petition with the Surface Transportation Board (Board)² pursuant to 49 United States Code (U.S.C.) 10502 for authority for construction by SJRL and operation by BNSF of a new rail line near Houston, Harris County, Texas. In the petition, the Applicants proposed the construction of approximately 12.8 miles of new rail line to serve the petro-chemical industries in the Bayport Industrial District (Bayport Loop). The proposed rail line would be constructed between the Bayport Loop and the former Galveston, Houston, and Henderson Railroad (GH&H) line now owned by the Union Pacific Railroad Company (UP), near Ellington Field.

The Board, pursuant to 49 U.S.C. 10901, is the agency responsible for granting authority for the construction, operation, and maintenance of new rail line facilities. Accordingly, the Board through its Section of Environmental Analysis (SEA) is the lead agency responsible under the National Environmental Policy Act (NEPA) for the preparation of this Draft Environmental Impact Statement (EIS), which identifies and evaluates the potential environmental impacts associated with the Proposed Action and Alternatives. The U.S. Coast Guard (USCG), the Federal Aviation Administration (FAA), and the National Aeronautics and Space Administration (NASA) are cooperating agencies, pursuant to 40 Code of Federal Regulations (CFR) 1501.6. The Federal agencies' actions considered in this Draft EIS will or may include decisions by the Board and each of the three cooperating agencies. The USCG has to decide whether to issue a bridge permit for the Proposed Action and the other Alternatives that involve construction under Section 9 of the General Bridge Act of 1946. If requested by the City of Houston, which owns Ellington Field, the FAA has to decide whether to grant a change to the Airport Layout Plan for Ellington Field and release airport property for the Proposed Action Alternative pursuant to 49 U.S.C. 47151-47153, 49 U.S.C. 47107(c)(2)(B), and 49 U.S.C. 47107(a)(16). NASA has to decide whether to grant an easement for the Proposed Action and one other Alternative to cross an access road.

¹ SJRL is a partnership, based in Delaware, comprised of BNSF, BayRail, LLC (wholly owned by BNSF), and affiliates of four plastics and chemical production companies located in the Bayport Loop. The four production companies are: ATOFINA Petro-chemicals, Inc., Basell USA, Inc., Equistar Chemicals, LP, and Lyondell Chemical Company. The affiliated limited partners of SJRL are Bay Junction, Inc. (wholly owned by ATOFINA), Basell Impact Holding Company, Equistar Bayport, LLC, and Lyondell Bayport, LLC.

² The Surface Transportation Board is a bipartisan, decisionally independent adjudicatory body, organizationally housed within the U.S. Department of Transportation. The Surface Transportation Board was established by the Interstate Commerce Commission Termination Act of 1995 (49 U.S.C. 10101 *et seq.*; P.L. 104-88, December 29, 1995) to assume some of the regulatory functions that the Interstate Commerce Commission administered. The Surface Transportation Board has jurisdiction over rail rates, railroad acquisitions and consolidations, rail constructions, and abandonments of rail service. Other functions of the Interstate Commerce Commission were either eliminated or transferred to different agencies within the Department of Transportation.

SEA³ has prepared this Draft EIS to identify and evaluate potential environmental impacts of the proposed rail line construction and operation from the Bayport Loop. With this Draft EIS, SEA and the cooperating agencies seek to inform Federal, state, and local agencies, elected officials, affected communities, and the general public about the potential environmental effects of the Proposed Action and Alternatives. SEA also sets forth in this Draft EIS its conclusions regarding these effects, the various Alternatives SEA has considered, and those actions that SEA currently recommends that the Board require of the Applicant to mitigate or alleviate potential environmental impacts discovered during the course of the environmental review.

For reasons that are detailed later in this Executive Summary, the Proposed Action has attracted more public interest than it might have under other circumstances. Therefore, in conducting its environmental analysis thus far, SEA has considered a wide variety of interests and issues. To address the strong public interest, SEA has conducted technical analyses and studies, consultations, and site visits and gathered extensive environmental data in more depth than it typically would for a construction project with low train traffic and mostly negligible impacts and some moderate impacts. SEA has undertaken extensive public outreach activities (detailed later in this Executive Summary) to give interested parties, agencies, elected officials, and the general public opportunities to learn about the project, define issues, and actively participate in the environmental review process.

After the close of the public comment period on the Draft EIS, a Final EIS will be prepared in response to comments on the Draft EIS. The Board then will issue a final decision, based on the entire environmental record, including the Draft EIS, the Final EIS, and all public and agency comments received, determining whether to give final approval to the project, and if so, appropriate environmental mitigation. The Applicants would not be able to begin construction of the new rail line until the Board and cooperating agencies issue final decisions and the decisions have become effective.

PURPOSE AND NEED FOR ACTION

The purpose of the proposed construction and operation of a new rail line into the Bayport Loop is to provide competitive rail service to the shippers located within the Loop. The shippers in the Bayport Loop are currently served solely by UP. The Applicants have stated that the proposed new line would add capacity and infrastructure to the Houston area, would provide shippers with access to BNSF's extensive single line service, and would provide shippers with flexibility and Alternative transportation routes in the event of future service disruptions. The Applicants have stated that the proposed new rail line is needed to alleviate the constraints currently experienced by shippers, due to the existence of only one rail service option, and to provide an effective replacement for competitive conditions prior to the 1996 merger of UP with the Southern Pacific Rail Corporation (SP).

³ While this Draft EIS for convenience generally refers only to SEA, the document reflects the input of the three cooperating agencies.

PROJECT CONTEXT

The context for this project includes other proposed or potential projects, a variety of land uses in close proximity to each other, and other issues. For example, there is substantial public controversy over the Port of Houston Authority's (PHA) proposed Bayport Channel Container/Cruise Terminal (Bayport Terminal), which, if approved, would be constructed in close proximity to part of the Bayport Loop Build-Out. There is a perception that the eight trains per day from the Bayport Terminal, which are estimated to begin after 2012, would use the Bayport Loop rather than the proposed new Port Terminal Association (PTRA) line. SEA and the U.S. Army Corp of Engineers (USACE) have concluded that the two proposed projects are not connected. However, the public interest in the proposed Bayport Terminal and the perception that the projects are connected has promoted increased public interest in the Bayport Loop Build-Out.

The Board's regulations, found at 49 CFR 1105.7, provide thresholds for analysis of potential environmental impacts based on predicted rail traffic levels for a proposed action. The projected traffic levels from the proposed Bayport Loop Build-Out, two trains per day on average, do not exceed these thresholds. Nevertheless, given the level of public interest in this project, SEA has analyzed rail construction and operations-related impacts in detail. To conduct a detailed analysis of rail operations, SEA had to collect baseline rail operations information. Collecting that information in a complex rail center like Houston is challenging. SEA reviewed several sources of information, consulted with UP, BNSF, PTRA, the Federal Railroad Administration (FRA), and the Texas Department of Transportation (TxDOT), and conducted field work. Eventually, at SEA's request, UP, which owns most of the affected rail lines, undertook a concerted effort to determine a representative baseline.

In response to public comments, SEA analyzed a No-Build Alternative in this proceeding. The No-Build Alternative involves BNSF operating over existing UP lines and would not require any new rail line construction. The No-Build Alternative would require the Applicants to obtain trackage rights from UP for the Strang Subdivision,⁴ which they do not currently hold and cannot obtain under the Board's UP/SP merger decision. Although the Board cannot force UP to permit BNSF to operate over the Strang Subdivision, NEPA regulations require agencies to consider Alternatives in their environmental review processes that may be outside their jurisdiction (40 CFR 1502.14(c)).

In addition, the project area for the proposed rail line contains a number of land uses in close proximity to each other, including an airport with commercial, general aviation, military, and NASA operations, a one-of-a-kind NASA training facility, a water treatment plant, an active gas field, numerous pipelines, areas of natural habitat, residential areas, and the major petro-chemical complex that the Applicants propose to access.

⁴ UP currently uses the Strang Subdivision for rail traffic to and from the Bayport Loop. The Strang Subdivision runs roughly parallel to State Highway 225 and connects the Strang Yard (north of the Bayport Loop) with the GH&H line and other UP rail lines in southeast Houston.

The Proposed Action and all of the Alternatives require the Applicants to use trackage rights over lines owned by UP in order to reach the build-out. Most railroad build-out cases analyzed by SEA have not involved the use of trackage rights, but have involved build-outs to the applicant's own lines.

The existing Bayport Loop rail system was acquired by UP during its merger with the SP in 1996. In the final decision and as a condition of the merger approval, the Board used its authority to grant BNSF trackage rights over certain UP and SP rail lines to the extent required to replicate the competition that was lost when SP was absorbed into UP in the merger.⁵ The Board's decision included a provision that trackage rights would be granted to BNSF to ensure access to a competitive build-in or build-out. The Board stated that this would allow other rail companies to replicate the competitive options previously provided by the independent operations of UP and SP.

SCOPING AND PUBLIC INVOLVEMENT

On October 1, 2001, SEA served and distributed the Notice of Intent to Prepare an EIS to approximately 489 citizens, elected officials, Federal, state, and local agencies, and interested organizations, and initiated a toll-free project hotline. On November 26, 2001, SEA served and distributed the Notice of Availability of Draft Scope of Study for the EIS, Notice of Scoping Meetings, and Request for Comments, to approximately 526 citizens, elected officials, Federal, state, and local agencies, and interested organizations. The distribution encompassed the communities surrounding the Proposed Action and the communities along the UP lines connecting the Proposed Action to New South Yard. SEA placed notices of the scoping meetings in several community newspapers and the *Houston Chronicle*. SEA also provided public service announcements to several Spanish-speaking radio stations. Due to a subsequent change in Proposed Action routing from New South Yard to the CMC Dayton Yard⁶ that took place after the scoping meetings and publication of the Final Scope, SEA sent notification of the Proposed Action and copies of this Draft EIS to Federal, state, and local officials who represent the communities along the new route. SEA has also made this Draft EIS available at libraries and other repositories along the new route.

The scoping meetings were held in the afternoons and evenings on January 14 and 15, 2002, at the Pasadena Convention Center. SEA used a workshop format to allow attendees to provide comments and ask questions. The 189 people who attended the scoping meetings included citizens, organizations, elected officials, and officials from Federal, state and local agencies.

At the request of public commenters and several elected officials, SEA extended the comment period for an additional 30 days to March 14, 2002, to provide the public sufficient opportunity

⁵ Union Pacific/Southern Pacific Merger, 1 STB 233 (1996).

⁶ This route is a change from the route described in the Applicants' original petition and was brought to the Board's attention in a letter dated August 6, 2002. In response to community concerns about existing congestion near New South Yard, the Applicants proposed this route as voluntary mitigation to avoid New South Yard altogether. The Applicants state that this change does not affect the proposed route for the new rail line construction.

to explore Alternatives to the proposed route and raise issues pertinent to scoping. SEA published the notice in the *Federal Register* on February 13, 2002, and distributed it to 650 citizens, elected officials, Federal, state, and local agencies, and interested organizations. SEA conducted additional public involvement activities, including translating project information into Spanish and making it available to communities and community leaders who live along the existing UP lines.

SEA published the Notice of Availability of Final Scope of Study for the EIS in the *Federal Register* on July 19, 2002. The Final Scope was translated into Spanish and both the English and Spanish versions were widely distributed in the project area. SEA consulted with and will continue to consult with Federal, state, and local agencies, affected communities, and all interested parties to gather and disseminate information about the proposal.

ALTERNATIVES CONSIDERED IN SEA'S ENVIRONMENTAL REVIEW

Build Alternatives. The Build Alternatives include the Proposed Action and other Alternatives that would require new rail line construction. The name of each Build Alternative (i.e., the Proposed Action, the Original Taylor Bayou Crossing, and Alternatives 1C, 2B, and 2D) is derived from the various proposed new rail alignments and each Alternative includes both the proposed new rail line segment and the use of trackage rights over UP lines that BNSF either has or can obtain under the UP/SP merger decision. Figure ES-1 depicts the Proposed Action and Alternatives that were considered in detail.

Proposed Action. The Proposed Action is the Applicants' preferred route. It involves the construction of a new rail line from the Bayport Loop to an existing rail line that would allow the Applicants to provide competitive rail service to the petro-chemical industries in the Bayport Loop. Implementation of the Proposed Action would result in rail operations to and from the new line over trackage rights on UP's GH&H line and UP's East Belt, Terminal, Lafayette, and Baytown Subdivisions to the storage yard operated by CMC Railroad at Dayton, approximately 30 miles northeast of Houston. The Applicants' original Proposed Action anticipated rail operations over the GH&H line and UP's Glidden Subdivision to BNSF's New South Yard. On August 6, 2002, the Applicants advised SEA that in response to concerns raised by the communities in and around New South Yard regarding existing congestion, they proposed to route the Bayport Loop traffic to the CMC Dayton Yard instead of New South Yard. During the scoping period the Applicants' preferred route for the new rail line was referred to as Alignment 1 and the Applicants identified it in their petition for exemption, filed with the Board on August 30, 2001. The new rail line would be approximately 12.8 miles long. During the scoping period, the Applicants stated that their Preferred Alternative should be altered to include Alternative 1B, which follows Port Road across Taylor Bayou.

BNSF has explained in its application that it anticipates that it would run, on average, one train of approximately 36 to 66 cars per day in each direction (for a daily total of two trains and 72 to 132 rail cars). On an annual basis, a total of 13,000 to 24,000 carloads (loaded rail cars) and an equal number of empty rail cars would operate on the proposed line, representing approximately 28 to 51 percent of the rail traffic generated in the Bayport Loop. The majority of the shipments

Figure ES-1
Alternatives Considered in SEA's Environmental Review

would consist of non-hazardous plastic pellets, transported in hopper cars. The remainder would consist of chemicals, transported in tank cars. At current BNSF estimates, approximately 1,500 to 7,000 carloads of hazardous materials would be transported over the line per year. Other miscellaneous inbound and outbound commodities are also likely to be transported.

Original Taylor Bayou Crossing. The Applicants originally proposed to cross Taylor Bayou using Alternative 1, at a location that the National Marine Fisheries Service later identified as containing Essential Fish Habitat. The original Taylor Bayou crossing was replaced as the Applicants' preferred crossing by Alternative 1B, which affects a much smaller amount of Essential Fish Habitat.

Alternative 1C. After consulting with the FAA and the City of Houston, SEA requested that the Applicants develop Alternative 1C to address two issues associated with Ellington Field. The Proposed Action passes through Ellington Field's Runway Protection Zone and it would run between 240 acres of adjacent land owned by the City of Houston and the airport. Alternative 1C avoids these issues and consists of a two-mile modification of the Proposed Action from its turnout on the GH&H line to the Boeing and NASA facilities on Space Center Boulevard.

Alternative 2B. The Applicants developed Alternative 2B to avoid crossing land owned by the Deer Park School District and to move the rail line further away from a major residential neighborhood.

Alternative 2D. The Applicants developed Alternative 2D for the same reasons they developed Alternative 2B and also to avoid businesses, residences, and churches along Genoa-Red Bluff Road, minimize conflicts with the proposed expansion of Genoa-Red Bluff Road, and avoid a water main and a gas main that parallel Genoa-Red Bluff Road. The Applicants have identified this Alternative as their preferred alignment between Alternatives 2B and 2D.

No-Build Alternative. The No-Build Alternative requires no new rail line construction. It would involve BNSF using the same trackage rights over existing UP lines that BNSF would use for the Proposed Action, although BNSF would need trackage rights over a smaller portion of the GH&H line, and, most importantly, this Alternative would require BNSF to obtain trackage rights from UP over the Strang Subdivision to access the Bayport Loop. BNSF cannot obtain trackage rights over the Strang Subdivision under the UP/SP merger decision. BNSF has approached UP about obtaining such trackage rights, but UP has stated publicly that it will not grant trackage rights unless BNSF provides full compensation for UP's lost revenue. To date, BNSF and UP have not reached an agreement on compensation and BNSF cannot operate over the Strang Subdivision. SEA is analyzing this Alternative in response to several requests made during scoping. Also, despite the fact that the Board does not have the authority to force UP to permit BNSF to operate over the Strang Subdivision, SEA is required, under CEQ regulations (40 CFR 1502.14(c)), to analyze Alternatives outside the agency's jurisdiction.

No-Action Alternative. Under the No-Action Alternative, the Applicants would not provide competitive rail service to the Bayport Loop, either by new construction or trackage rights. The shippers in the Bayport Loop would continue to be served solely by UP. The rail operations on the rail lines to and from the Bayport Loop in the Houston area would remain as they are today.

ALTERNATIVES ELIMINATED FROM DETAILED STUDY

SEA eliminated some Alternatives from further consideration because they were deemed unreasonable or infeasible. Figure ES-2 depicts the Alternatives that SEA eliminated from detailed study. These included Alternatives 1A, 2, 2A, 2C, 3, and 4. In accordance with the CEQ regulations at 40 CFR 1502.14(a), SEA discusses in this Draft EIS the reasons why some Alternatives are not considered in detail. SEA eliminated Alternatives 1A, 2, and 2A because they would require a single grade-separated crossing of Genoa-Red Bluff Road and Red Bluff Road, which was determined to be economically infeasible and would conflict with the City of Pasadena's plans to extend Genoa-Red Bluff Road to the north/northeast to connect with Fairmont Parkway. SEA eliminated Alternative 2C because of the curvature of the track and approaching grade that would be necessary for the proposed grade-separated crossing of Space Center Boulevard and because it is environmentally inferior to the other Alternatives being studied. SEA eliminated Alternatives 3 and 4 because the Applicants cannot obtain trackage rights over the Port Terminal Railroad Association (PTRA) lines to access the proposed new lines.

SEA also considered and eliminated several Alternatives suggested in public comments. One suggestion from the public required construction and operation of a new rail line along an alignment in the State Highway 225 corridor to reach the build segments of Alternatives 3 or 4. The Applicants had previously considered such a route, but were unable to develop a feasible alignment. Another suggestion involved construction and operation of a new rail line using a new Beltway 8 - Fairmont Avenue alignment. SEA eliminated this Alternative because it would have involved taking or adversely affecting a number of businesses along Fairmont Parkway. Public comments submitted during scoping also suggested that SEA consider negotiations between Bayport Loop shippers and UP for lower shipping rates. However, this suggestion does not meet the purpose and need of the Proposed Action.

OVERVIEW OF AFFECTED ENVIRONMENT

The project area is mostly located in southeast Harris County, which is at the center of one of the largest concentrations of plastics and chemical manufacturers in the U.S. Harris County is the third largest county in the U.S. by population and encompasses the City of Houston. Houston has long been an important railroad center and serves as a hub for freight traffic, including plastics and chemicals traffic. The proposed Bayport Loop Build-Out is designed to gain additional rail access to a large petro-chemical complex that contains at least 24 major production facilities. In addition, the project area contains a number of other land uses in close proximity to each other, including an airport with military flights and NASA training flights, a one-of-a-kind NASA training facility, a water treatment plant, a wastewater treatment plant, an active gas field, numerous pipelines, areas of natural habitat, and residential and business areas.

Figure ES-2
Alignments Eliminated from Further Study

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

SEA conducted an in-depth review of the Applicants' proposal, which included independent environmental analysis of potential project impacts and evaluation of issues raised by government agencies and the public.

Rail Operations and Rail Operations Safety. The Applicants' proposal to operate two trains per day, on average, over the build segments of the Build Alternatives would have little impact on rail operations or rail operations safety because only one train would operate at a time. The Applicants' trains from the Bayport Loop may be required to wait until one or more UP trains clear the GH&H line before they could move from the new rail line onto the GH&H line. This new train movement would not be expected to interfere with operations on the GH&H line. Overall impacts relative to current conditions on all the existing lines over which the Applicants' new train movements would occur, including those used under the Build Alternatives and the No-Build Alternative, are expected to be minimal. The impacts from the additional two trains per day would be negligible because of the slow train speeds, the small increase in train traffic, and the safety measures that are currently in place. The No-Action Alternative would have no additional adverse impacts on rail operations or rail operations safety.

Hazardous Materials Transportation Safety. There would be negligible impacts on hazardous materials transportation safety from all of the Alternatives, including the No-Action Alternative. All of the Alternatives, including the No-Action Alternative, have low risks associated with the transportation of hazardous materials, given that the amount of hazardous materials that would be transported is relatively small and train speeds would generally be low. Almost all of the project area is already exposed to the risks associated with the transportation of hazardous materials with the exception of small areas around the Build Segments, which are currently not exposed to risks from rail transported hazardous materials. These areas would be newly exposed to a low risk.

Pipeline Safety. Construction of the Build Alternatives would have a minimal impact on pipeline safety. Construction of roads and rail lines over pipeline corridors occurs routinely following established engineering practices and all of the pipelines have been identified in the project area. Most pipeline accidents that are the result of construction activities occur when the construction crew did not check for the presence of a pipeline before digging. There are small differences in the potential increase or decrease in impacts on pipelines among the Build Alternatives because of differences in the number of pipelines crossed or the length of pipeline located adjacent to the proposed right-of-way. There would be no impacts associated with rail construction for the No-Build and No-Action Alternatives, because no construction would be required. Operation of any of the Alternatives would have a minimal impact on pipeline safety because of the very low likelihood that rail operations would damage a pipeline and the low probability that serious consequences would result even if such damage were to occur.

Grade Crossing Delay and Safety. Under the Build Alternatives and the No-Build Alternative there would be a negligible impact on grade crossing delay for existing and new grade crossings, with the level of service remaining at the highest levels (A or B) for all grade crossing, with the exception of one grade crossing that would remain at LOS C under all Alternatives. In addition, one additional grade crossing on the No-Build Alternative would have level of service C. The

increase in average grade crossing delay per vehicle would average less than 0.5 seconds for the Build Alternatives and the No-Build Alternative and, thus, would be negligible. No new construction or changes in rail operations would occur under the No-Action Alternative and there would be no impacts on grade crossing delay beyond those that currently occur.

Under the Build Alternatives and No-Build Alternative there would be a negligible impact on traffic safety at grade crossings, with negligible estimated increases in predicted accident frequency for all highway/rail at-grade crossings. The No-Action Alternative would not increase the accident frequency at existing grade crossings because no new construction or changes in rail operation would occur.

Noise and Vibration. The increase in rail traffic along existing rail lines of two trains per day over the Build Alternatives and the No-Build Alternative would result in a minimal increase in noise impacts. The Build Alternatives and the No-Build Alternative would increase noise levels by 2 dBA or less and would add approximately 190 to 230 noise-sensitive receptors to a baseline of approximately 1,319 to 1,392 currently affected receptors within the 65_{L_{dn}} noise contour. In general, an increase of less than 3 dBA from a baseline of 65 dBA L_{dn} is not considered adverse for railroad noise. There would be no noise impacts from operations along the Build Segments because the noise contour from an average of two trains per day would extend to approximately 20 feet to each side of the track and there are no noise-sensitive receptors within that distance. Construction noise would temporarily affect recreational activities. No construction or construction noise would occur at night. The No-Action Alternative would not increase the number of sensitive receptors affected by railroad noise. None of the Alternatives would have vibration impacts.

Climate and Air Quality. The climate and air quality impacts of the Build Alternatives would be minimal. Even using conservative assumptions (which produce higher emissions estimates), the estimated increase in emissions from rail construction and operation and associated grade-crossing delays are small relative to other existing sources in the area. Rail line construction and operation of the proposed two trains per day, on average, would not subject Harris County to any new State Implementation Plan conformity requirements. The increase in emissions for the No-Build Alternative would be less, primarily because emissions associated with construction would be avoided. No increase in emissions would result from the No-Action Alternative.

Water Resources. Groundwater impacts from the Build Alternatives would be negligible. Any impacts would be most likely to occur during construction. Excavation might increase the chance of groundwater impacts if the upper limit of the aquifer were to be reached. Spills of hazardous materials during construction could cause impacts, but the potential for spills is low and any spills would likely be small. The No-Build and No-Action Alternatives would not result in any groundwater impacts.

All of the Build Alternatives would have similar lengths of new rail line within the floodplain and would have negligible impacts because most of the affected acreage would not be permanently modified but would be spanned with bridges. None of the Build Alternatives would exacerbate flooding, although each would disturb approximately 32 acres of the 100-year floodplain. The proposed drainage channels and floodplain crossings would be designed to

manage stormwater flows. The No-Build and No-Action Alternatives would have no impact on the floodplains in the project area because they would not involve rail line construction.

Impacts on surface waters from the construction of the Build Alternatives would be moderate. The Build Alternatives would cross (via bridges) nine jurisdictional surface water bodies and six non-jurisdictional drainage channels. The Build Alternatives also have an increased chance of habitat loss and a temporary increase in total suspended solids and other pollutants (such as metals, phosphorus, and nitrogen compounds) due to bridge and culvert construction. The potential for hazardous materials incidents impacting surface waters is also greater for the Build Alternatives. Alternatives 2B and 2D would have slightly less impact during construction than the Proposed Action or Alternative 1C because they do not cross Horsepen Bayou or an unnamed non-jurisdictional surface water body at the north end of Ellington Field. Impacts from operation of the Build Alternatives would be negligible. The No-Build Alternative would have no construction-related impacts on surface waters. Impacts from operation would be minimal and similar to the Build Alternatives, although different surface waters would be affected. There would be no increase in impacts on surface waters from the No-Action Alternative above those that already exist.

The Build Alternatives could directly impact some wetland areas in the right-of-way and indirectly impact others near the construction footprint. The Build Alternatives would disturb approximately 2.84 acres of jurisdictional and about 4.22 acres of non-jurisdictional wetlands. The Build Alternatives would also cause the permanent loss of some wetlands from placement of fill materials. The Original Taylor Bayou Crossing would impact more jurisdictional wetlands, including about 0.18 acres more of gilgai habitat and about 0.77 acres more of tidal marsh. Thus, their impact on wetlands would be greater than for the No-Build and No-Action Alternatives and would be considered moderate during construction. Impacts would be negligible during operation and maintenance. The No-Build Alternative would have a negligible impact on wetlands due to a slightly increased probability of a hazardous materials release. The No-Action Alternative would not impact wetlands.

Biological Resources. The Build Alternatives would have a moderate impact on plant communities during the construction phase. The Texas prairie dawn, which is a Federally-listed endangered species, grows near portions of the proposed rights-of-way for the Build Alternatives. Construction of the Build Alternatives would not have an adverse effect on the Texas prairie dawn. However, operation and maintenance of the Build Alternatives could have a negligible impact on the Texas prairie dawn from herbicide drift or a hazardous materials spill. There would be some impacts during construction on remnant coastal prairie and riparian forests east of Ellington Field and along waterways. Operations and maintenance are expected to have a negligible impact on plant communities for the Build Alternatives.

The Build Alternatives would have negligible impacts on fish and wildlife resources. Construction of the Build Alternatives would result in an increase in fragmented habitats and disruption to wildlife movements. Construction impacts on Essential Fish Habitat would be minor or negligible. Similarly, the impacts from operations and maintenance of the Build Alternatives and No-Build Alternative would be negligible, resulting from potential hazardous

materials releases or wildlife fatality caused by train movements. The No-Action Alternative would not cause increased impacts on biological resources.

Topography, Geology, and Soils. Construction of the Build Alternatives would have negligible impacts on topography and soils along the proposed right-of-way. Due to the flat natural topography, most of the proposed rail line would be constructed at or near the natural grade with only small areas requiring depressions to be filled or higher areas to be reduced. The Build Alternatives would have no impact on geology. The No-Build and No-Action Alternatives would have no impacts on topography, geology, and soils, because they would not involve new rail line construction.

Land Use. The Build Alternatives would have negligible impacts on land use. The Proposed Action would cross the Runway Protection Zone (RPZ) for runway 35L at Ellington Field, but the FAA has determined that there is no airspace conflict. If requested by the City of Houston, which owns Ellington Field, the FAA has to decide whether to approve a change to the Airport Layout Plan to allow the Proposed Action to cross two sections of the airport and to release the land in the RPZ. The FAA has to decide whether to release the affected airport property from the City of Houston's obligations under the grants that the FAA gave the City to purchase the land. The land in the southeast corner of the airport that the Proposed Action would cross, was deeded to the City by the General Services Administration (GSA) as surplus land. The surplus land has a deed restriction that requires the FAA to determine whether a non-aviation use would have an adverse effect on the airport. The Proposed Action would also run between Ellington Field and a 240-acre parcel of land that the City of Houston purchased to prevent residential encroachment on Ellington Field. The City is considering a mix of light industrial, heavy industrial, and office uses for this 240-acre parcel as it develops a master plan for Ellington Field. The Proposed Action and Alternative 1C would parallel runway 4/22. [FAA initially indicated that the Instrument Landing System (ILS) for runway 22 could be degraded while trains use the track parallel to the runway. The Applicants conducted a glide slope evaluation study, which concluded that neither the Proposed Action nor Alternative 1C would adversely impact the ILS or the glide slope. The FAA reviewed the study and concurred with this conclusion.]

The No-Build and No-Action Alternatives would have no adverse impacts on land use.

The U.S. Army Corps of Engineers is coordinating evaluation of the Proposed Action and Alternatives to ensure compliance with the Texas Coastal Management Program. SEA expects the Proposed Action and all Alternatives to be consistent with the Texas Coastal Management Program.

The Build Alternatives would have negligible impacts on prime farmland because of the small acreage of prime farmland that would be affected. The No-Build and No-Action Alternatives would have no impacts on prime farmland.

Socioeconomics. The Build Alternatives would have negligible impacts on the local economy and public services. The Build Alternatives could create a small number of temporary new construction jobs and generate up to \$80 million in construction-related expenditures, but most of this would be absorbed by the local economy and would not have long range effects. The

effects associated with Alternative 2B would differ from the other Build Alternatives because it could displace several businesses along Genoa-Red Bluff Road. However, the overall effects would be negligible. The No-Build Alternative would not involve construction and would have almost no impacts on the local economy or public services. The No-Action Alternative would not impact the local economy or public services.

Construction of the Proposed Action or Alternative 1C would have short-term and minor visual impacts on Sylvan Rodriguez Park and the residences on the west side of Clear Lake City, which are also located near State Highway 3 and Ellington Field. Recreational activities at the Baywood Country Club would also be affected temporarily by the Build Alternatives because of construction noise associated with the construction of the grade separation of Red Bluff Road. Construction activities also would temporarily affect recreation and have visual impacts on Armand and Taylor Bayous. The No-Build and No-Action Alternatives would not cause any increase in recreation and aesthetic impacts.

Energy. The Build Alternatives could have a small but negligible impact on the pipeline transport of energy resources due to potential short-term construction effects. The Build Alternatives would not affect any of the active oil and gas wells in the project area. There would be no effect on the transport of energy resources or recyclable commodities. There would be no truck-to-rail diversions under the Build Alternatives or the No-Build Alternative. Operation of the Build Alternatives and No-Build Alternative, which are of similar length, would be likely to increase annual diesel fuel consumption. SEA considers that the potential increase in fuel consumption would have a negligible effect on energy resources. There would be a negligible effect on energy resource consumption from vehicle delays at grade crossings. Under the No-Action Alternative, there would be no change in existing conditions and, therefore, no impacts on energy resources beyond those that exist today.

Hazardous Materials/Waste Sites. Alternative 2D would pass between two cells of the closed Hughes Landfill, which contains construction and demolition waste. Excavation and relocation of landfill materials, if required, would not cause an adverse impact. No adverse impacts associated with other documented or undocumented hazardous materials/waste sites were identified. The No-Build and No-Action Alternatives would not impact hazardous materials/waste sites.

Cultural Resources. Along the route for the Build Alternatives, no prehistoric sites were found and only one historic site was located. However, this site did not qualify for the National Register of Historic Places (NRHP) and did not require further investigation. The Texas Historical Commission concurred with SEA's finding of no historic properties affected. The No-Build and No-Action Alternatives would not involve construction and, therefore, would not cause any adverse effects on historic properties. Consultation with Indian tribes was not required under Section 106 of the NHPA because the project has no adverse effects on historic properties. Nevertheless, SEA did contact seven tribes with Areas of Concern in the Houston area. Several tribes expressed no concern over the Proposed Action and Alternatives and several tribes could not be reached. These tribes were added to the distribution list to receive the Notice of Availability of the Draft EIS.

Navigation. The Build Alternatives would cause negligible short-term impacts on navigation on Armand and Taylor Bayous during bridge construction. No adverse impact is expected from operation and maintenance of the bridges due to the limits currently placed on navigation by pre-existing bridges. No bridge construction would occur under the No-Build and No-Action Alternatives and, therefore, there would be no impacts on navigation.

Environmental Justice. All the existing rail lines abut or traverse numerous environmental justice populations. There are no environmental justice populations along the Build Segments of the Proposed Action or Alternative 1C. There are environmental justice populations along the Build Segments of Alternatives 2B and 2D. SEA determined that train horn noise levels would increase, but the increase would not be adverse for environmental justice populations along the existing rail lines used by the Build Alternatives and the No-Build Alternative. No change in railroad noise would result from the No-Action Alternative.

SEA determined that some effects from hazardous materials transportation would be experienced by environmental justice populations along the existing rail lines used by the Build Alternatives and the No-Build and No-Action Alternatives. Several environmental justice populations fall within the zone that would be evacuated in the event of a hazardous materials release. However, SEA has determined that the risk from hazardous materials transportation is low and, therefore, the impact is negligible.

Environmental justice populations are located near the majority of existing grade crossings for all Alternatives. However, SEA has determined that grade crossing delay and safety impacts would be negligible. Thus, all of the Alternatives would have negligible grade crossing delay and safety impacts for environmental justice populations.

SECTION 4(F) EVALUATION

FAA and USCG are cooperating agencies in the preparation of this EIS and are required to complete a Section 4(f) evaluation under the USDOT Act of 1966. Three potential Section 4(f) resources could be impacted by the Build Alternatives. These are Sylvan Rodriguez Park and the streambeds of Armand and Taylor Bayous. Alternative 1C would be located approximately 300 feet from the boundary of Sylvan Rodriguez Park. Construction of Alternative 1C would have negligible constructive use impacts on Sylvan Rodriguez Park in the form of temporary noise and aesthetic affects. No land would be directly taken from the park.

Each of the Build Alternatives would cross Armand Bayou at the same location, close to pipeline and transmission wire easements and gas well access roads. The proposed bridge over Armand Bayou would not impair the quality of this Section 4(f) resource.

Each of the Build Alternatives, except for the Original Taylor Bayou Crossing, would cross Taylor Bayou at the same location on the boundary of the Bayport Industrial District, close to existing rail and road bridges and a transmission wire crossing. The proposed bridge over Taylor Bayou would not impair the quality of this Section 4(f) resource.

CUMULATIVE IMPACTS

SEA evaluated several planned or reasonably foreseeable projects taking place in the same area as the proposed Bayport Loop Build-Out or potentially affecting the environment in the same area. These projects included the proposed Bayport Terminal, the proposed Shoal Point Container Terminal, the City of Pasadena's plans for a light industrial district, possible growth at Ellington Field in general aviation and commercial, industrial office or institutional development as identified in the City of Houston's Ellington Field Master Plan, expansion at the Southeast Houston Water Treatment Plant, and various road projects. SEA concluded that there would be no notable cumulative impacts resulting from the proposed Bayport Loop Build-Out in combination with these other plans and projects.

SUMMARY OF SEA'S PRELIMINARY RECOMMENDED MITIGATION

In past rail construction and operations procedures, the Board has encouraged applicants to develop voluntary mitigation to address concerns that go beyond the Board's jurisdiction. Accordingly, the Applicants in this case have submitted proposed voluntary mitigation measures for SEA's consideration. The Applicants developed these voluntary mitigation measures in consultation with local communities and interested agencies. The voluntary mitigation is set forth in Chapter 6 of the Draft EIS.

Based on the independent environmental analysis, consultations with appropriate agencies, and available project information, SEA considered preliminary recommended mitigation to address the environmental impacts of the proposed project. SEA's conclusion is that the Build Alternatives, which are the Alternatives involving construction, would cause moderate wetland, surface water, and biological impacts. SEA recommends that the Board impose the Applicants' proposed voluntary mitigation measures as a condition of petition approval. The mitigation measures address these moderate impacts as well as a range of additional issues of interest to the community. The Proposed Action and Alternatives would have negligible effects on all other impact areas. Recognizing that SEA is not recommending any mitigation other than the voluntary mitigation, SEA specifically requests meaningful comments on any additional mitigation.

SEA will make its final recommendations to the Board on environmental mitigation in the Final EIS after considering all public comments on the Draft EIS and conducting further environmental analysis, agency consultation, and site visits, as appropriate. The Board will then make its final decision regarding this project and any environmental conditions it might impose.

REQUEST FOR COMMENTS ON THE DRAFT EIS

The public and any interested parties are encouraged to make written comments on all aspects of this Draft EIS. SEA will consider all comments in preparing the Final EIS which will include response to all substantive comments and SEA's final conclusions on potential impacts and SEA's final recommendations. All comments must be submitted within the comment period, which will close January 27, 2003. When submitting comments on the Draft EIS, please be as

specific as possible and substantiate your concerns and recommendations. Please mail written comments to:

Surface Transportation Board
1925 K Street, NW
Washington, DC 20423-0001

To ensure proper handling of your comments, please mark your submission:

Attention: Dana White
Section of Environmental Analysis
Environmental Filing FD No. 34079

Due to delays in the delivery of mail currently being experienced by Federal agencies in Washington, D.C., SEA encourages that comments be faxed to: 1-866-293-4979. Faxed comments will be given the same weight as mailed comments; therefore, persons submitting comments by fax do not have to also send comments by mail.

Further information about the project can be obtained by calling SEA's toll-free number at 1-888-229-7857 (TDD for the hearing impaired 1-800-877-8339).

This Draft EIS is also available at the Board's website at: www.stb.dot.gov.

PUBLIC MEETINGS

In addition to receiving written comments on the Draft EIS, SEA will host two public meetings. At each meeting, SEA will give a brief presentation and interested parties will be invited to make oral comments. SEA will have a transcriber present to record the oral comments in either English or Spanish. Written comments may also be submitted at the meetings. Meetings will be held at the following locations, dates, and times:

Pasadena Convention Center
7902 Fairmont Parkway, Pasadena, TX
January 14, 2003
7-9 p.m.

Cesar E. Chavez High School
8501 Howard Drive, Houston, TX
January 15, 2003
7-9 p.m.